

CHAPTER 12 HEALTH AND SANITATION

Article VII Oil and Gas Well Drilling Regulations.

Section 12-140. Purpose.

The purpose of this Chapter is to establish regulations which describe the process for the review and approval of oil and gas well drilling and production, but more specifically to:

- A. establish reasonable and uniform limitations, safeguards, and regulations for present and future operations related to the exploring, drilling, developing, producing, transporting, and storing of oil and gas and other substances produced in association with oil and gas within the corporate City of Grapevine limits;
- B. provide for the safe, orderly, and healthful development of the area within the city and within the area surrounding the city and to promote the health, safety, and general welfare of the community;
- C. encourage appropriate protection to environmentally sensitive areas;
- D. establish procedures for the review and approval of gas well site plans.

Section 12-141. Definitions.

The following words, terms, and phrases, when used in this Article, shall have the meanings as ascribed to them in this section, except where the context clearly indicates a different meaning. In the absence of a definition in this section, a word, term, or phrase shall have the meaning as otherwise ascribed in this Code of Ordinance. In the absence of a definition in the Code of Ordinances, words, terms, and phrases shall have the meanings generally accepted in everyday use.

Section 12-142. Permit Required.

No drilling or production of an oil or gas well shall begin until the following have been approved:

- A. No application for an oil or gas well development site plan or oil or gas well permit or any other application for drilling and production shall be approved until a Special Use Permit ("SUP") has been approved in accordance with the Zoning Ordinance. Denial of an SUP for oil or gas well drilling and production shall be grounds for denial of any other permit applications pertaining to such use for the same land.
- B. An oil or gas well development site plan that has been approved by the City Council is on file with the City that conforms to the requirements of this

Ordinance and the Code of Ordinances.

- C. An oil or gas well permit shall not constitute authority for the re-entering and drilling of an abandoned well. An operator shall obtain a new well permit in accordance with the provisions of this section if the operator is re-entering and drilling an abandoned well.
- D. No oil, gas well permit shall be issued for any well to be drilled on City of Grapevine owned property without the prior consent of City Council.

Section 12-143. Permit Conditions.

The following shall be applicable to all gas well site plan and permit applications:

- A. It shall be the policy of the City of Grapevine to consider oil and gas well drilling and production as subject to the control of the City pursuant to the City of Grapevine Comprehensive Plan for the orderly, planned, efficient, and economical development of the City.
- B. The City has no obligation to extend water or sewer service to any lot, tract or parcel or land site planned for oil or gas well drilling and production in violation of this Chapter.
- C. All oil and gas well site plans shall conform to the rules and regulations set forth herein.
- D. This Chapter is not intended to repeal, abrogate, or impair any existing plans or ordinances. However, if the provisions of this Chapter and other ordinances or plans conflict or overlap, the most restrictive provisions thereof shall apply.
- E. The provisions contained in this Chapter, shall be considered as the minimum requirements for review and approval of an oil or gas well site plan.
- F. An oil or gas well permit shall not be required for exploration for oil or gas. Exploration of oil or gas means geologic or geophysical activities, including, but not limited to surveying and seismic exploration, related to the search for oil, gas, or other sub-surface hydrocarbons.

Section 12-144. Site Plan Requirements

The applicant requesting gas well drilling and production approval shall submit the required number of copies of a site plan drawing as determined by the Administrative Official and which complies with this Section.

- A. Identify truck and vehicle routes to the well site, including:

1. Tabularized summary of non-TXDOT roads that will be used, and;
 2. Lengths of each road that will be used to access the site.
- B. Identify location and dimension of existing or proposed driveway(s) to be used.
- C. Identify the 100-year flood plain.
- D. Identify the proposed source of water.
- E. Identify and show the proposed method of erosion control.
- F. Identify the location of proposed lease lines and property lines.
1. Label distance between wells and property lines;
 2. Label distance between wellheads and structures within 1,000 feet of wellheads.
 3. Label distance between temporary holding ponds and floodplains.
- G. Show location of all proposed underground pipelines. As built drawings shall be filed with the Engineering Department. All pipelines proposed in the public right-of-way shall require a Right-of-way Use Agreement.
- H. Identify if pipelines connect with a Gas Distribution System.
- I. General Requirements:
1. Property Owner /Mineral Lessee / Mineral Owner / Gas Well Operator - The names and addresses of the current owner of record, mineral lessee, minerals owner and gas well operator.
 2. Surveyor Name - The name, address and telephone number of the surveyor responsible for the site plan which shall contain the seal of a Texas Registered Professional Land Surveyor.
 3. Gas Well Name – Title block containing the proposed name of the gas well(s), acres in lease, survey, and jurisdiction.
 4. Location Map - A location map showing the tract by reference to streets or highways.
 5. Date - The date the site plan was prepared.
 6. Scale & North Arrow - The site plan shall be prepared at a numerical scale

no greater than one (1) inch equals one hundred (100) feet unless approved by the Administrative Official responsible for subdivision review. A graphic scale symbol shall be placed on the drawing with a north arrow indicating the approximate true north.

7. Development Boundary Lines - The development boundary lines shall be shown in heavy lines so as to provide a differentiation with the internal features of the area being proposed for site planting. The location and dimensions of all boundary lines of the property shall be expressed to the nearest hundredth foot.
8. Metes and Bounds Description - A written metes and bounds description of the property shall be shown on the site plan and be capable of reproducing such lines upon the ground with a closure error of less than 1:25,000. The legal description shall include reference to an original survey or subdivision corner, and the Texas NAD83 State Plane Coordinate System. The legal description shall include the acreage of the total area of the proposed subdivision and be consistent with the subdivision boundary. The legal description shall contain information to show the last instrument conveying title to each parcel of property involved in the proposed subdivision, giving grantor, grantee, date, and land records reference.
9. Adjacent Properties - All property lines, streets and easements on lands immediately adjacent to and contiguous with the perimeter of the proposed subdivision and extending one hundred (100) feet shall be shown with the names of the owners as shown on the most current Tax Assessor's files.
10. Street Rights-of-Way - The width of all public street rights-of-way shall be shown on the site plan. The general location and width shall be consistent with the Master Thoroughfare Plan. Dimensions shall be shown for all curves. The distance from the centerline of any existing roadway of a boundary street to the proposed subdivision shall be shown to determine the adequacy of right-of-way along the route and to determine if additional right-of-way is necessary to accommodate the proposed street.
11. Permanent Structures - The location and general outline of any existing permanent structures, parking lots, driveways, and other significant structures.
12. City Limit Lines - The location of the city limit boundaries of the City of Grapevine and any adjacent city shall be shown on the site plan.
13. Easements - The location and dimension of all existing or proposed easements shall be shown on the site plan drawing indicating whether

such easement is for any specific purpose.

14. Sheet Size - Map sheets shall be twenty-four by thirty-six (24"x 36") inches. Sheets shall be numbered in sequence if more than one (1) sheet is used and an index sheet provided with match lines.
15. Site plan Notes and Conditions - When appropriate, the site plan shall contain a listing of any site plan notes and site plan conditions in a readily identifiable location with each note numbered consecutively.
16. Street Names - All street names shall be shown on the site plan. New street names shall be sufficiently different in sound and in spelling from other street names in the city to avoid confusion. The continuation of an existing street shall bear the same name.
17. Lot Areas - The area for each lot expressed in square feet shall be shown on the site plan.
18. Survey Notes - The Final Site plan shall be accompanied by one (1) set of surveyor's closure notes for the boundary of the subdivision. The notes shall be referenced in the same manner as the site plan.
19. Certification Blocks – All site plans shall contain the appropriate certification blocks which shall be similar to those shown.

Section 12-145. Oil and Gas Well Drilling and Production Standards

A. On-site Requirements.

1. Entrance Gate: A secured entrance gate shall be required and signs identifying the entrance to the drill site or operations site shall be reflective.
2. Fencing: All drilling features including storage pits shall be fenced to prevent access, unless 24-hour supervision is provided. When not supervised, all fences shall remain locked.
3. Illegal Dumping: No person shall place, deposit, or discharge any oil, naphtha, petroleum, asphalt, tar, hydrocarbon substance, or any refuse including wastewater or brine, from any oil or gas operation or the contents of any container used in connection with any oil or gas operation in, into, or upon any public right-of-way, storm drain, ditch or sewer, sanitary drain, any body of water, or any private property within the corporate limits or extraterritorial jurisdiction of the City of Grapevine.
4. Fire Suppression: All fire suppression and prevention equipment required

by any applicable federal, state, or local law shall be provided by the operator, at the operator's cost, and maintenance and upkeep of such equipment shall be the responsibility of the operator.

5. Pit Lining: Pit liners shall be designed, constructed, and installed to prevent any migration of materials from the pit into adjacent subsurface soils, ground water, or surface waters at any time during the life of the pit. All lined pits shall adhere to the liner standards set forth by the Railroad Commission.
6. Screening: All well heads, storage tanks, separation facilities or other mechanical equipment shall be screened with a 6-foot high solid screen fence, good side facing from the gas or oil well.
7. Closed-loop drilling fluid systems: Closed-loop drilling fluid systems shall be used instead of lined reserve pits.
8. Discharge: No person shall place, deposit, discharge, or cause or permit to be placed, deposited or discharged, any oil, naphtha, petroleum, asphalt, tar, hydrocarbon substance, or any refuse including wastewater or brine from any oil and/or gas operation, or the contents of any container used in connection with any oil and/or gas operation in, into, or upon any public right-of-way, alleys, streets, lots, storm drain, ditch or sewer, sanitary drain or any body of water or any private property in the City of Grapevine.
9. Drilling fluids: Low toxicity glycols, synthetic hydrocarbons, polymers, and esters shall be substituted for conventional oil-based drilling fluids.
10. Drilling fluid storage pits: No drilling fluid storage pits shall be located within the City of Grapevine.
11. Drill stem testing: All open hole formation or drill stem testing shall be done during daylight hours. Drill stem tests may be conducted only if the well effluent during the test is produced through an adequate oil and/or gas separator to storage tanks and the effluent remaining in the drill pipe at the time the tool is closed is flushed to the surface by circulating drilling fluid down the annulus and up the drill pipe.
12. Signs:
 - a. A sign shall be immediately and prominently displayed at the gate on the temporary and permanent site fencing. Such sign shall be durable material, maintained in good condition and, unless otherwise required by the Commission, shall have a surface area of

not less than two square feet nor more than four square feet and shall be lettered with the following:

- i. Well name and number;
 - ii. Name of operator;
 - iii. The emergency 911 number; and
 - iv. Telephone numbers of two persons responsible for the well who may be contacted 24 hours a day in case of an emergency.
- b. Permanent weatherproof signs reading "DANGER NO SMOKING ALLOWED" shall be posted immediately upon completion of the well site fencing at the entrance of each well site and tank battery or in any other location approved or designated by the fire chief of the City of Grapevine. Sign lettering shall be four inches in height and shall be red on white background or white on a red background. Each sign shall include the emergency notification numbers of the fire services department and the operator, well and lease designations required by the Commission.

B. Operations and Equipment Standards.

1. During fracing process:
 - a. "flowback" operations to recover fluids used during fracture stimulation shall be performed during daylight hours;
 - b. a watchperson shall be required at all times during such operations; and
 - c. at no time shall the well be allowed to flow or vent directly to the atmosphere without first directing the flow through separation equipment or into a portable tank.
2. Nuisance prevention measures shall be implemented to prevent or control offensive odor, fumes, dust, noise, and vibration in accordance with the conditions set forth by the approved ordinance.
3. Directional lighting shall be provided for the safety of oil or gas well drilling and production operations and shall be provided so as to not disturb or adversely affect adjacent developments.
4. The operator shall, at all times, comply with the rules and regulations of the Railroad Commission including but not limited to all applicable Field Rules.

5. Only electric motors will be used for the purpose of pumping oil or gas. Internal combustion engines may be used in drilling operations if they have mufflers that will reduce noise levels to not more than 65 decibels at any point 300 feet from the boundary of the drill site or operation site, whichever is greater.
6. No venting of gas into the open air in residential areas except as allowed by the Railroad Commission and as approved by the Fire Marshal.
7. Only Light Sand Fracture Technology or technologies approved by the Fire Marshal in accordance with the Fire Code shall be used to fracture stimulate a well.
8. Air, gas, and pneumatic drilling shall not be permitted.
9. The operator shall provide written notice to property owners within 1,000 feet 72 hours prior to the commencement of fracture activities.
10. No storage tanks or separation facilities shall be placed in the 100-year floodplain.
11. The operator shall place an identifying sign at each point where the flow line or gathering line crosses a public street or road.
12. Structures shall not be built or placed over flow lines or gathering lines.
13. Landscaping: Screening shrubs shall be installed completely around the well site and all fences and be sufficient to screen from view the structures sought to be screened. Screening shrubs shall be a minimum of three feet in height at planting, have the potential to grow to a mature height of a maximum of five feet and, if necessary, must have an installed irrigation system that provides total water coverage to all plant materials. The vegetation or berms shall be kept in an attractive state and in good condition at all times by the applicant or operator. All landscape and irrigation plans shall be submitted to the DRC for approval.
14. Vehicle routes for oil and gas well permits. Vehicles associated with drilling and/or production in excess of three tons shall be restricted to such streets designated as arterials, collectors or local commercial as delineated in the City of Grapevine's thoroughfare plan, and in accordance with the truck/vehicle route as provided for in Section 12.143 A. herein. The vehicles shall be operated on state arterials whenever capable of being used. Such vehicles shall be operated only on City of Grapevine arterials, collectors and local commercial only when it is not possible to use a state arterial to fulfill the purpose for which such vehicle is then

being operated.

15. Work hours for oil and gas well permits: Site development, other than drilling, shall be conducted only between 7:00 a.m. and 7:00 p.m. Monday through Friday and 9:00 a.m. to 5:00 p.m. on Saturday. Truck deliveries of equipment and materials associated with drilling and/or production, well servicing, site preparation and other related work conducted on the well site shall be limited to between the above same work hour restrictions except in cases of fires, blowouts, explosions, and any other emergencies or where the delivery of equipment is necessary to prevent the cessation of drilling or production.
16. Noise restrictions for oil and gas well permits:
 - a. No drilling, producing or other operations shall produce a sound level greater than 65 dB(a) when measured at a distance of 300 feet from the boundary of the drill site or operation site, whichever is greater. The noise level shall be the average of sound level meter readings taken consecutively at any given time from four or more diametrically opposite positions, four feet above ground level, when measured at a distance of 300 feet from the production equipment. A maximum sound level of 85 dB(a) shall apply to formation fracturing when measured at a distance of 300 feet from the boundary of the drill site or operation site, whichever is greater.
 - b. No person shall operate or permit to operate in connection with the operation of a producing well any engine, compressor or motor-driven machinery of any type which creates a sound level greater than 65 dB(a) when measured at a distance of 300 feet from the boundary of the drill site or operation site, whichever is greater. The noise level shall be the average of sound level meter readings taken consecutively at any given time from four or more diametrically opposite positions measured at a distance of 300 feet from the boundary of the drill site or operation site, whichever is greater.
17. Installation of pipelines on, under or across public property: The operator shall apply to the City of Grapevine for an agreement on, over, under, along or across the City of Grapevine streets, sidewalks, alleys and other City of Grapevine property for the purpose of constructing, laying, maintaining, operating, repairing, replacing and removing pipelines so long as production or operations may be continued under any oil, gas, or combined well permit issued pursuant to this article. Operator shall:

- a. Not interfere with or damage existing water, sewer or gas lines or the facilities of public utilities located on, under or across the course of such rights-of-way.
 - b. Furnish to the director of development of the City of Grapevine a site plan showing the location of such pipelines.
 - c. Construct such lines out of pipe in accordance with the City of Grapevine codes and regulations properly cased and vented if under a street;
 - d. Grade, level and restore such property to the same surface condition, as nearly as practicable, as existed when operations for the drilling of the well were first commenced.
 - e. All required agreements pursuant to this division shall be completed, reviewed, and resolved by the City of Grapevine engineer, City of Grapevine attorney, City of Grapevine city manager, and, if required, by City Council, prior to the determination of any oil, gas, or combined permit as administratively complete.
18. Flow lines and gathering lines:
- a. Operator shall place an identifying sign at each point where a flow line or gathering line crosses public street or road.
 - b. Operator shall place a warning sign for lines carrying H₂S (hydrogen sulfide) gas as required by all applicable state or federal regulatory agencies.
 - c. All flow lines and gathering lines within the corporate limits of the City of Grapevine (excluding City of Grapevine utility lines and franchise distribution systems) that are used to transport oil, gas, and/or water shall be limited to the maximum allowable operating pressure applicable to the pipes installed and shall be installed with at least the minimum cover or backfill specified by the American National Safety Institute Code, as amended.
 - d. Structures shall not be built over flow lines or gathering lines.
19. No oil, gas, or combined well permit shall be issued for any well to be drilled within any of the streets or alleys of the City of Grapevine, and no street or alley shall be blocked or encumbered or closed due to any

exploration, drilling or production operations unless prior consent is obtained from the City of Grapevine engineer. Any consent from the oil and gas inspector shall be temporary in nature and state the number of hours and/or days that any street or alley may be blocked, encumbered or closed.

C. Environmental Safety Standards.

1. Erosion control practices shall be conducted for all oil or gas wells. Compost berms that are at least 1-foot high and 2-feet wide, or equivalent erosion devices, shall be installed so that all portions of the well pad that may drain off-site are contained.
2. Damage resulting from sedimentation and / or erosion shall be repaired immediately.
3. Gas or oil wells may have a target location or bottom-well hole location that is under the floodway when the gas or oil well is drilled directionally from a location outside such areas.
4. Each well shall be equipped with an automated valve that closes the well in the event of an abnormal change in operating pressure. All wellheads shall contain an emergency shut off valve to the well distribution line.
5. Each storage tank shall be equipped with a level control device that will automatically activate a valve to close the well in the event of excess liquid accumulation in the tank.
6. All storage tanks shall be anchored for stability.
7. All storage tanks shall be equipped with either steel or concrete secondary containment systems including lining with an impervious material. The secondary containment system shall be of a sufficient height to contain one and one-half (1 ½) times the contents of the largest tank in accordance with the Fire Code. Drip pots shall be provided at pump out connections to contain the liquids from the storage tank.
8. Outdoor storage areas shall be equipped with a secondary containment system designed to contain a spill from the largest individual vessel. If the area is open to rainfall, secondary containment shall be designed to include the volume of a 24-hour rainfall as determined by a 25-year storm and provisions shall be made to drain accumulations of ground water and rainfall.
9. Tank battery facilities shall be equipped with a remote foam line and a lightning arrestor system.

10. No structures shall be built over an abandoned well.
11. No oil or gas well drill sites shall be allowed on slopes greater than ten (10) percent.
12. No salt-water disposal wells shall be located within the City of Grapevine.
13. No oil, gas, or combined well permit shall be issued for any well to be drilled within 200 feet of a floodplain.
14. For floodplains identified by the Federal Emergency Management Agency (FEMA) on the most current federal insurance rate map (FIRM), except for zones A or X, the distance measurement from the proposed well bore shall be calculated as a straight line, without regard to intervening structures or objects, to the closest exterior point of the base flood elevation topographic contour.
15. For all areas within the City of Grapevine's corporate limits, in which the proposed well bore is within 775 feet of any type of surface water conveyance, including, but not limited to, creeks, streams, drainage ditches, or other constructed storm water conveyance systems, calculating distance in a straight line from the conveyance centerline, an approximate flood study shall be prepared by the applicant and approved by a City of Grapevine engineer. Upon completion of the approximate flood study, if the City of Grapevine engineer determines that the proposed well bore is within 100 feet of any type of surface water conveyance, or other flood hazard area, then a detailed flood study shall be prepared by the applicant and approved by the City of Grapevine engineer.
16. No oil or gas well permit will be issued for any well where the center of the well at the surface of the ground is located within 1,000 feet of an existing fresh water well intended for domestic use.
17. The contents of any pit shall always be maintained at least 2 feet below the top of the pit.
18. Fencing shall be installed to restrict access to open water reservoirs utilized in oil or gas well drilling operation at a drill site within the corporate limits of the City.
19. After the well has been completed, or plugged and abandoned, the operator shall clean and repair all damage to public property caused by such operations within thirty (30) days.
20. After any spill, leak or malfunction, the operator shall remove or cause to

be removed all waste materials from any public or private property affected by such spill, leak or malfunction. Cleanup operations shall begin immediately.

21. The drill site shall at all times be kept free of debris, pools of water or other liquids, contaminated soil, weeds, brush, trash or other waste material outside the drill site within a radius of one hundred (100) feet around any separators, tanks and producing wells within the leased property.
22. Drilling mud pits shall adhere to the following requirements:
 - a. Only freshwater-based mud systems shall be permitted. Saltwater-based mud systems and oil-based mud systems are prohibited.
 - b. No metal additives may be added to any drilling fluids.
 - c. All fluid produced from the well during completion of production shall be held in enclosed containers while stored on the property.
 - d. The pit and its contents shall be removed from the premises within ninety (90) days after completion of the well; provided, however, that the permittee may apply for a 90 day extension from such requirements based on showing of good cause, necessity to maintain said pit, inclement weather, or other factors. The City may designate a period of time shorter than the 90-day extension set out herein.
23. A copy of the hazardous materials management plan as required by the City of Grapevine's Fire Marshal's office. In addition to the hazardous materials management plan, all material safety data sheets (MSDSs) for all hazardous materials that will be located, stored, transported, and/or temporarily used on the drilling site shall be provided to the oil and gas inspector and Fire Marshal.
24. A copy of the emergency response plan as required by the City of Grapevine's Fire Marshal's office.
25. A copy of the determination by the Texas Commission on Environmental Quality of the depth of useable quality ground water.

D. Setback Distances.

1. Wells setbacks for gas or oil well permits:

It shall be unlawful to drill, redrill, deepen, re-enter, activate or convert any

well, the center of which, at the surface of the ground, is located:

- a. Within 1,000 feet from any public park; or
 - b. Within 1,000 feet from any residence, religious institution, public building, hospital building or school for which a building permit has been issued on the date of the application for a drilling permit is filed with the Fire Marshal; or
 - c. Except for buildings addressed by Subsection D.1.b. immediately hereinabove, within 300 feet from any building; or
 - d. Within 500 feet from any lease line as indicated on Texas Railroad Commission Form W-1, or recorded property, lot or tract line; or
 - e. Within 500 feet from any existing storage tank, or source of potential ignition; or
 - f. Within 200 feet of any public street, road, highway, or right-of-way line; or
 - g. Within 100 feet of any building accessory to, but not necessary to the operation of the well; or
 - h. Within 1,000 feet to any fresh water well; or
 - i. The measurement of all distances shall be calculated from the proposed well bore, in a straight line, without regard to intervening structures or objects, to the closest exterior point of the any object listed in a. through h. above.
 - j. For purposes of this section, a "building used, or designed and intended to be used, for human occupancy" means an enclosed space, other than a residence, in which individuals congregate for amusement or similar purposes or in which occupants are engaged at labor, and which is equipped with means of egress, light, and ventilation facilities."
- 2. The distances set out in this may be reduced at the discretion of the City Council.
 - 3. Tank batteries, well facilities and equipment shall be located at least 300 feet from any public park, or from any residence, religious institution, public building, hospital building or school, or any other building used, or designed and intended to be used, for human occupancy, for which a building permit has been issued on the date of the application for a drilling

permit is filed. The distance shall be calculated from the closest tank batteries, well facilities and/or equipment, in a straight line, without regard to intervening structures or objects, to the closest exterior point of the building.

Section 12-146. Insurance and Indemnification Requirements.

The operator shall provide or cause to be provided the insurance described below for each well for which a Gas or Oil Well Permit is issued, such insurance to continue until the well is abandoned and the site restored. The operator may provide the required coverage on a "blanket basis for multiple wells". Such coverage shall be subject to the review and approval of the City Attorney for the City of Grapevine.

A. General Requirements. Indemnification and Express Negligence Provisions.

1. Each Gas Well Permit issued by the City shall include the following language:

Operator does hereby expressly release and discharge, all claims, demands, actions, judgments, and executions which it ever had, or now have or may have, or assigns may have, or claim to have, against the City of Grapevine, and/or its departments, its agents, attorneys, elected officials, officers, contractors, servants, successors, assigns, sponsors, volunteers, or employees, created by, or arising out of personal injuries, bodily injuries, or death, known or unknown, and injuries to property, real or personal, or in any way incidental to or in connection with the performance of the work performed by the operator under a gas or oil well permit and the operator caused by or arising out of, that sequence of events which occur from the operator under the Oil or Gas Well Permit and work performed by the operator shall fully defend, protect, indemnify, and hold harmless the City of Grapevine, Texas, and/or its departments, agents, officers, servants, employees, successors, assigns, sponsors, or volunteers from and against each and every claim, demand, or cause of action and any and all liability, damages, obligations, judgments, losses, fines, penalties, costs, fees, and expenses incurred in defense of the City of Grapevine, Texas, and/or its departments, agents, officers, servants, or employees, including, without limitation, personal injuries and death in connection therewith which may be made or asserted by Operator, its agents, assigns, or any third parties on account of, arising out of, or in any way incidental to or in connection with the performance of the work performed by the Operator under a Gas or Oil Well Permit and, the Operator agrees to indemnify and hold harmless the City of Grapevine, Texas, and/or its departments, and/or its officers, agents, attorneys, elected officials, attorneys, servants, employees, successors, assigns, sponsors, or volunteers from any liabilities or damages suffered as a result of claims, demands, costs, or judgments against the City and/or, its

departments, its officers, agents, servants, or employees, created by, or arising out of the acts or omissions of the City of Grapevine occurring on the drill site or operation site in the course and scope of inspecting and permitting the gas or oil wells INCLUDING, BUT NOT LIMITED TO, CLAIMS AND DAMAGES ARISING IN WHOLE OR IN PART FROM THE SOLE NEGLIGENCE OF THE CITY OF GRAPEVINE OCCURRING ON THE DRILL SITE OR OPERATION SITE IN THE COURSE AND SCOPE OF INSPECTING AND PERMITTING THE GAS OR OIL WELLS. IT IS UNDERSTOOD AND AGREED THAT THE INDEMNITY PROVIDED FOR IN THIS SECTION IS AN INDEMNITY EXTENDED BY THE OPERATOR TO INDEMNIFY AND PROTECT THE CITY OF GRAPEVINE, TEXAS AND/OR ITS DEPARTMENTS, AGENTS, OFFICERS, SERVANTS, OR EMPLOYEES FROM THE CONSEQUENCES OF THE NEGLIGENCE OF THE CITY OF GRAPEVINE, TEXAS AND/OR ITS DEPARTMENTS, AGENTS, OFFICERS, SERVANTS, OR EMPLOYEES, WHETHER THAT NEGLIGENCE IS THE SOLE OR CONTRIBUTING CAUSE OF THE RESULTANT INJURY, DEATH, AND/OR DAMAGE. LIABILITY FOR THE SOLE NEGLIGENCE OF THE CITY IN THE COURSE AND SCOPE OF ITS DUTY TO INSPECT AND PERMIT THE GAS OR OIL WELL IS LIMITED TO THE MAXIMUM AMOUNT OF RECOVERY UNDER THE TORT CLAIMS ACT.

2. All policies shall be endorsed to read "this policy will not be cancelled or non-renewed without 30 days advanced written notice to the owner and the City except when this policy is being cancelled for nonpayment of premium, in which case 10 days advance written notice is required".
3. Liability policies shall be written by carriers licensed to do business in Texas and with companies with a: VIII or better rating in accordance with the current Best Key Rating Guide, or with non-admitted carriers that have a financial rating comparable to carriers licensed to do business in Texas approved by the City.
4. Liability policies shall name as "Additional Insured" the City and its officials, agents, employees, and volunteers.
5. Certificates of insurance shall be presented to the City evidencing all coverage's and endorsements required by this Section, and the acceptance of a certificate without the required limits and/or coverage's shall not be deemed a waiver of these requirements.
6. Claims made policies will not be accepted except for excess policies or unless otherwise provided by this Chapter.

B. Required Insurance Coverages.

1. Commercial General Liability Insurance.
 - a. Coverage should be a minimum Combined Single Limit of \$1,000,000 per occurrence for Bodily Injury and Property Damage. This coverage shall include premises, operations, blowout or explosion, products, completed operations, blanket contractual liability, underground property damage, broad form property damage, independent contractor's protective liability and personal injury.
 - b. Environmental Impairment (or Seepage and Pollution) shall be either included in the coverage or written as separate coverage. Such coverage shall not exclude damage to the lease site. If Environmental Impairment (or Seepage and Pollution) Coverage is written on a "claims made" basis, the policy shall provide that any retroactive date applicable precedes the effective date of the issuance of the permit. Coverage shall apply to sudden and non-sudden pollution conditions resulting from the escape or release of smoke, vapors, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste material or other irritants, contaminants or pollutants.
2. Automobile Liability Insurance. Minimum Combined Single Limit of \$500,000 per occurrence for Bodily Injury and Property Damage. Such coverage shall include owned, non-owned, and hired vehicles.
3. Worker's Compensation Insurance. In addition to the minimum statutory requirements, coverage shall include Employer's Liability limits of at least \$100,000 for each accident, \$100,000 for each employee, and a \$500,000 policy limit for occupational disease, and the insurer agrees to waive rights of subrogation against the City, its officials, agents, employees, and volunteers for any work performed for the City by the operator.
4. Excess (or Umbrella) Liability Insurance. A minimum limit of \$10,000,000, covering in excess of the preceding insurance policies.
5. Control of Well Insurance:
 - a. Minimum limit of \$5,000,000 per occurrence.
 - b. Policy shall cover the Cost of controlling a well that is out of control, Re-drilling or Restoration expenses, Seepage and Pollution Damage. Damage to Property in the Operator's Care, Custody, and Control with a sub-limit of \$500,000 may be added.

6. Security:

- a. A security instrument that covers each well shall be delivered to the Fire Marshal before the issuance of the Gas or Oil Well Permit for the well. The instrument shall provide that it cannot be cancelled without at least thirty 30 days' prior written notice to the City and, if the instrument is a performance bond, that the bond cannot be cancelled without at least ten 10 days' prior written notice for non-payment of premium. The instrument shall secure the obligations of the operator related to the well to:
 - i. Repair damage, excluding ordinary wear and tear, if any, to public streets, including but not limited to bridges, caused by the operator or by the operator's employees, agents, contractors, subcontractors or representatives in the performance of any activity authorized by the Gas or Oil Well Permit;
 - ii. Comply with the insurance and security provisions set forth in this Section; and
 - iii. Pay fines and penalties imposed upon the operator by the City for any breach of the Gas or Oil Well Permit.
- b. The security instrument may be in the form of an irrevocable letter of credit or payment bond issued by a bank or surety approved by the City. The instrument shall run to the City for the benefit of the City, shall become effective on or before the date the Gas or Oil Well Permit is issued, and shall remain in effect until the well is abandoned and the site restored.
- c. A certificate of deposit may be substituted for the letter of credit or payment bond. The certificate shall be issued by a bank in the City of Grapevine County, Texas, shall be approved by the City, shall be payable to the order of the City to secure the obligations of the operator described above, and shall be pledged to the bank with evidence of delivery provided to the Fire Marshal. Interest on the certificate shall be payable to the operator.
- d. The security instrument may be provided for individual wells or on a "blanket" basis for multiple wells. The amount of the security shall be a minimum of \$50,000 for any single well and a minimum of \$100,000 for multiple wells on a "blanket" basis.
- e. The security will terminate when the Gas or Oil Well Permit is transferred, with respect to the operator-transfer or and if the operator-transferee provides replacement security that complies with this section, when the well is abandoned and the site restored,

and when the Fire Marshal consents in writing to such termination.

- f. An appeal of the determination of the amount of security required under this Chapter may be made to the City Council for final determination of the amount of security.

Section 12-147. Permit Approval

The Director of Public Works may condition the release of the approved Gas or Oil Well Permit upon the operator providing the security required by Section 12-145 and upon the operator entering into a Road Repair Agreement that will obligate the operator to repair damage excluding ordinary wear and tear, if any, to public streets, including but not limited to, bridges caused by the operator or by the operator's employees, agents, contractors, subcontractors or representatives in the performance of any activity authorized by the approved Gas or Oil Well Permit.

- A. The failure of Fire Marshal to review and issue a Gas or Oil Well Permit within 30 days shall not cause the application for the permit to be deemed approved.
- B. Each Gas or Oil Well Permit issued by the Fire Marshal shall:
 - 1. Identify the name of each well and its operator;
 - 2. Specify the date on which the Fire Marshal issued each permit;
 - 3. Specify the date by which drilling shall commence on at least one well covered by the permit otherwise the permit expires (such date shall not be less than one year after the date of issuance);
 - 4. Specify that if drilling is commenced on at least one well covered by the permit before the permit expires, the permit shall continue until the wells covered by the permit are abandoned and the site restored;
 - 5. Incorporate, by reference, the insurance and security requirements set forth in Section 12-146;
 - 6. Incorporate, by reference, the applicable rules and regulations of the Railroad Commission, including the applicable "field rules";
 - 7. Specify that no drilling operations (including the construction of internal private access roads) shall commence until the operator has provided the security required by Section 12-146;
 - 8. Contain the name, address, and phone number of the person designated to receive notices from the City, which person shall be a resident of Texas that can be served in person or by registered or certified mail; and

9. Incorporate by reference all permits and fees required.

Section 12-148. Emergency Reporting

A. Requirement to report emergencies:

1. The operator shall immediately notify the oil and gas inspector and Fire Marshal of any incident resulting in product loss from a hydrocarbon storage facility or pipeline facility, blowout, fire, explosion, incident resulting in injury, death, or property damage, or any other significant incidents as defined by the City.
2. A written report, containing a brief summary of the incident, shall be submitted to the oil and gas inspector by 5:00 p.m. on the first business day of the City of Grapevine following the incident, and a duplicate report shall be submitted to the Fire Marshal by the same time.
3. A follow-up report shall be submitted to the oil and gas inspector and the Fire Marshal within 30 days following the incident. The operator responsible for the follow-up incident report shall include the following information:
 - i. Operator/applicant name, phone number, addresses, and, if possible, e-mail address.
 - ii. Description of the incident, including, but not limited to, the time, date, location, and cause of the event.
 - iii. Duration of the incident, that is, when it began and when it terminated to the degree that it no longer constituted a hazard to the health, safety, and well-being of persons or property, regardless of the distance or separation from the place of incident.
 - iv. How the incident was brought under control and/or remedied.
 - v. A full and complete description of the type of inter-company investigation or other investigation or inquiry that was made concerning the incident, the findings or results of such inquiry or investigation, and the action taken as a result of the findings and inquiry concerning the prevention of the existence of future hazards.
 - vi. Signed and dated by the person responsible for such report.
4. The operator shall provide a copy of any "incident reports" or written complaints submitted to the Texas Railroad Commission within 30 days after the operator has notice of the existence of such reports or complaints. This shall include, but not be limited to, notification of any reportable quantity releases of oil, natural gas, and/or associated minerals, chemicals, or solid and/or liquid wastes, pursuant to regulatory

requirements established by the commission, and notification to the Fire Marshal of any fire, and/or equipment strikes by lightning.

5. Beginning on December 31st, after each well is completed, and continuing on each December 31st thereafter until the operator notifies the oil and gas inspector that the well has been abandoned and the site restored, the operator shall submit a written report to the Fire Marshal identifying any changes to the information that was included in the application for the applicable permit that have not been previously reported to the City of Grapevine.

Section 12-149. Periodic Reporting Requirements.

- A. The operator shall notify the Fire Marshal of any changes to the following information immediately, within one business day after the change occurs.
 1. The name, address, and phone number of the operator;
 2. The name, address, and 24-hour phone number of the person(s) with supervisory authority over drilling or operations activities;
 3. The name, address, and phone number of the person designated to receive notices from the City, which person shall be a resident of Texas that can be served in person or by registered or certified mail;
 4. The operator's Emergency Action Response Plan including "drive-to-maps" from public rights-of way to each drill site.
- B. The operator shall provide a copy of any "incident reports" or written complaints submitted to the Texas Railroad Commission or any other state or federal agency within 30 days after the operator has notice of the existence of such reports or complaints.
- C. Beginning on December 31st, after each well is completed, and continuing on each December 31st thereafter until the operator notifies the Fire Marshal that the well has been abandoned and the site restored, the operator shall prepare a written report to the Fire Marshal identifying any changes to the information that was included in the application for the applicable Gas or Oil Well permit that have not been previously reported to the City.

Section 12-150. Notice of Activities.

- A. Any person who intends to re-work a well using a drilling rig, to fracture stimulate a well after initial completion, or to conduct seismic exploration involving explosive charges shall give written notice to the City at least 10 days before the activities begin.

- B. Written notices must be provided, by the operator, to all residences within 1,000 feet of a well, 24 hours prior to fracing of a wellhead.
- C. The notice shall identify where the activities will be conducted and shall describe the activities in reasonable detail, including but not limited to the duration of the activities and the time of day they will be conducted.
- D. The notice shall also provide the address and 24-hour phone number of the person conducting the activities.
- E. The person conducting the activities will post a sign on the property giving the public notice of the activities, including the name, address, and 24-hour phone number of the person conducting the activities.

Section 12-151. Remedies of the City.

- A. If an operator (or its officers, employees, agents, contractors, subcontractors or representatives) fails to comply with any requirement of a Gas or Oil Well Permit (including any requirement incorporated by reference as part of the permit), the Fire Marshal shall give written notice to the operator specifying the nature of the alleged failure and giving the operator a reasonable time to cure, taking into consideration the nature and extent of the alleged failure, the extent of the efforts required to cure, and the potential impact on the health, safety, and welfare of the community. In no event, however, shall the cure period be less than 30 days unless the alleged failure presents a risk of imminent destruction of property or injury to persons or unless the alleged failure involves the operator's failure to provide periodic reports. The Fire Marshal may issue a Stop Work Order under the Fire Code.
- B. If the operator does not cure the alleged failure within the time specified by the subsection A, the City Attorney may notify the Texas Railroad Commission and request that the Texas Railroad Commission take appropriate action (with a copy of such notice provided to the operator), and the City may pursue any other remedy available.
- C. If the operator does not cure the alleged failure within the time specified by subsection A, the Fire Marshal may:
 - 1. Recommend to the City Council that the Gas or Oil Well Permit be suspended until the alleged failure is cured; or,
 - 2. If the operator fails to initiate and diligently pursue a cure recommend to the City Council that the Gas or Oil Well Permit be revoked.
- D. The decision of the Fire Marshal to recommend suspension or revocation of a

Gas or Oil Well Permit shall be provided to the operator in writing at least ten (10) days before any action by the City Council unless the alleged failure present a risk of imminent destruction of property or injury to persons

- E. If a Gas or Oil Well Permit is revoked, the operator may submit an application a new Gas or Oil Well Permit for the same well.

Section 12-152. Enforcement and Right of Entry.

- A. The Fire Marshal is authorized and directed to enforce this Chapter and the provisions of any Gas or Oil Well Permit. Whenever necessary to enforce any provision of this Chapter or a Gas Well Permit, or whenever there is reasonable cause to believe there has been a violation of this Chapter or a Gas or Oil Well Permit, the Fire Marshal, or the designated representative, may enter upon any property covered by this Chapter or a Gas or Oil Well Permit at any reasonable time to inspect or perform any duty imposed by this Chapter. If entry is refused, the City shall have recourse to every remedy provided by law and equity to gain entry.
- B. It shall be unlawful and an offense for any person to do the following:
 - 1. engage in any activity not permitted by the terms of a Gas or Oil Well Permit issued under this Chapter;
 - 2. fail to comply with any conditions set forth in a Gas or Oil Well Permit issued under this Chapter;
 - 3. violate any provision or requirement set forth under this Chapter.

Section 12-153. Plugged and Abandoned Wells.

- A. Whenever abandonment occurs pursuant to the requirements of the Texas Railroad Commission, the operator so abandoning shall be responsible for the restoration of the well site to its original condition as nearly as practicable, in conformity with the regulations of this article.
- B. Abandonment shall be approved by the Fire Marshal after restoration of the drill site has been accomplished in conformity with the following requirements at the discretion of the Fire Marshal:
 - 1. The derrick and all appurtenant equipment thereto shall be removed from drill site;
 - 2. All tanks, towers, and other surface installations shall be removed from the drill site;

3. All concrete foundations, piping, wood, guy anchors and other foreign materials regardless of depth, except surface casing, shall be removed from the site, unless otherwise directed by the Texas Railroad Commission;
 4. All holes and depressions shall be filled with clean, compactable soil;
 5. All waste, refuse or waste material shall be removed from the drill site; and
 6. During abandonment, operator shall comply with all applicable sections in this article.
- C. The operator shall furnish the following at the discretion of the Fire Marshal:
1. A copy of the approval of the Texas Railroad Commission confirming compliance with all abandonment proceedings under the state law; and
 2. A notice of intention to abandon under the provisions of this section and stating the date such work will be commenced. Abandonment may then be commenced on or subsequent to the date so stated.
- D. All abandoned or deserted wells or drill sites shall meet the most current abandonment requirements of the Texas Railroad Commission prior to the issuance of any building permit for development of the property. No structure shall be built over an abandoned well.

Section 12-154. Exemptions

With the exception of Section 12-144.A, 12-145.B.14, and the requirement to enter into a Roadway Repair Agreement under Section 12-147 herein, the requirements of this Article are not applicable to any property subject to the Airport Zoning Act pursuant to Chapter 241 of the Local Government Code.